

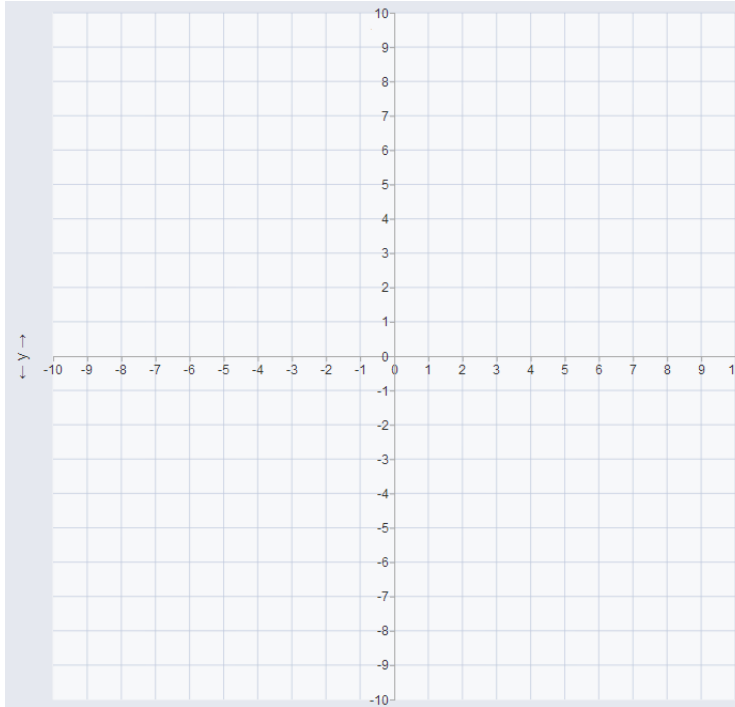
Name _____
Date _____

Transformations of Functions 4: All Transformations
Check-in Activity

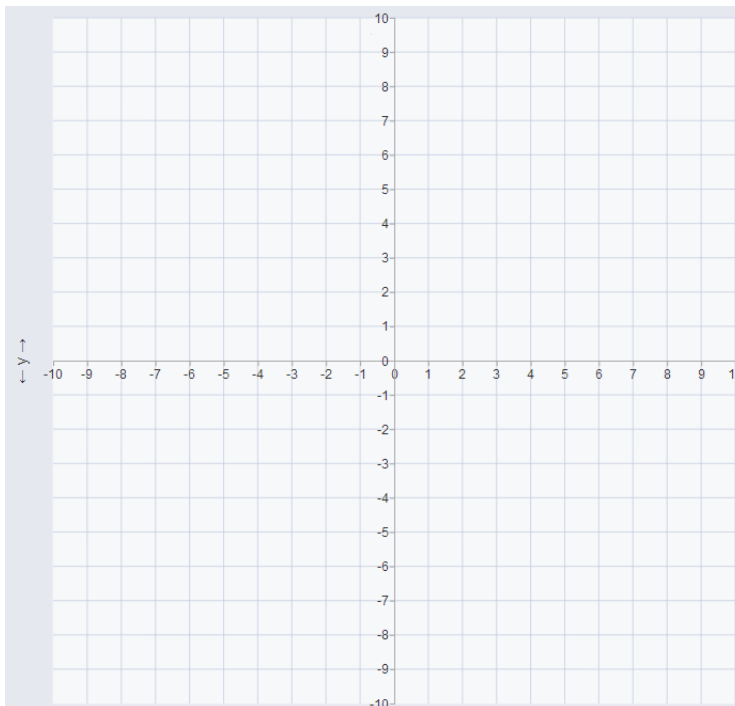
For the following functions,

- Name the transformations from the given parent function, and
- Graph the transformed function and the parent function on the same x-y axes.

1. $f(x) = 3\sqrt{x-2} + 1$

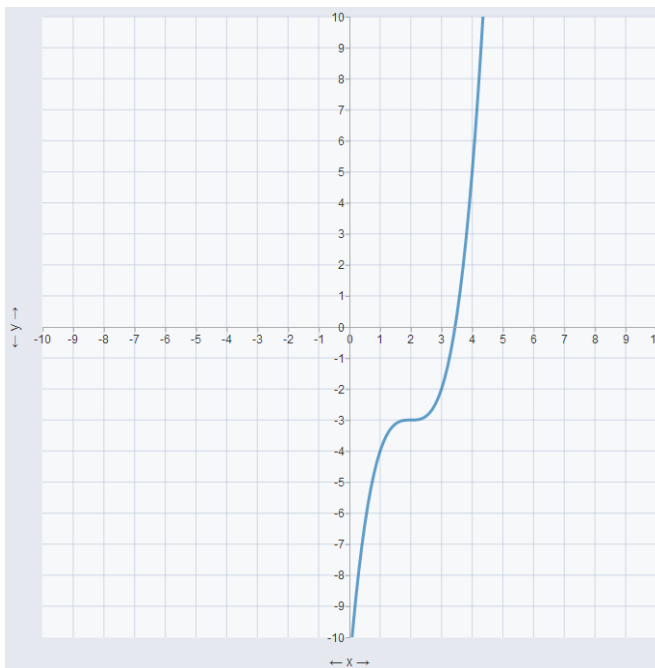


2. $f(x) = -\frac{1}{2}(x+1)^2 + 4$

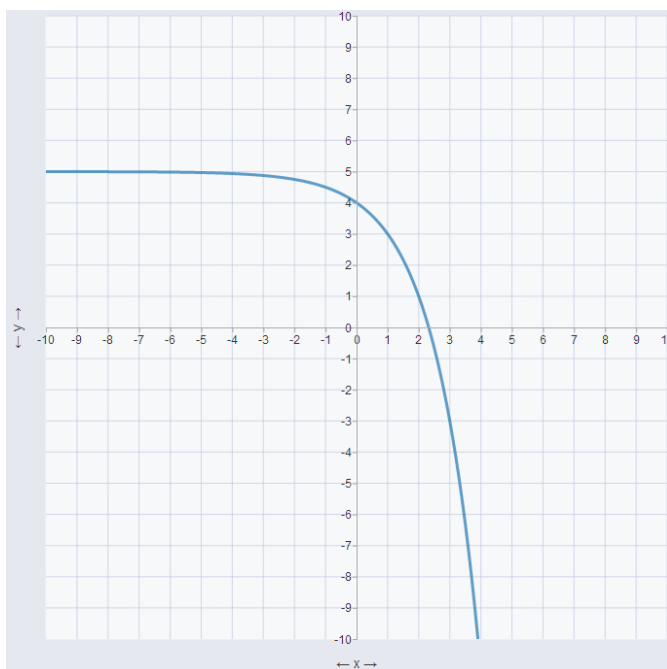


For the following functions, write an equation that would result in the given transformed graph.

3. Parent Function: $f(x) = x^3$

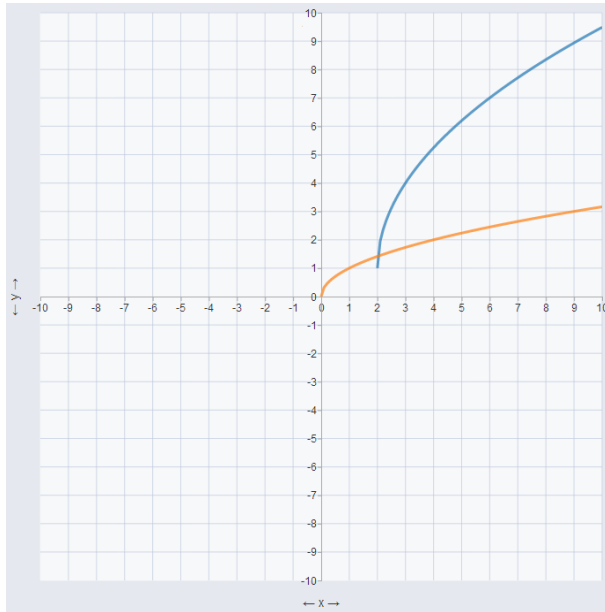


4. Parent Function: $f(x) = 2^x$



Answer Key:

1. Vertical Stretch, horizontal translation to the right 2 units, and vertical translation up 1 unit.



2. Reflection over the x-axis, vertical compression, horizontal translation to the left one unit, and vertical translation up four units.



3. $f(x) = (x - 2)^3 - 3$

4. $f(x) = -2^x + 5$